

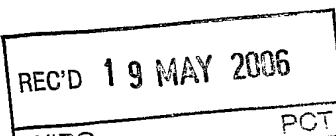
PATENT COOPERATION TREATY


PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



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|---|--|--|----------------------|
| Applicant's or agent's file reference somi/MC04A24 | | FOR FURTHER ACTION | See Form PCT/PEA/416 |
| International application No. PCT/IT2005/000018 | International filing date (day/month/year) 17.01.2005 | Priority date (day/month/year) 13.02.2004 | |
| International Patent Classification (IPC) or national classification and IPC INV. F23D14/06 | | | |
| Applicant SO.M.I. PRESS-SOCIETA'METALLI INIETTATI S.P.A. | | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 3 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | | |
| Date of submission of the demand 07.09.2005 | | Date of completion of this report 17.05.2006 | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 | | Authorized officer Coli, E Telephone No. +31 70 340-3802 | |



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IT2005/000018

Box No. I Basis of the report

1. With regard to the **language**, this report is based on
- ☒ the international application in the language in which it was filed
 - ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3(a) and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4(a))
 - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

| | |
|-----|-----------------------|
| 1-5 | as originally filed |
| 6 | filed with the demand |

Claims, Numbers

| | |
|-----|-----------------------|
| 1-7 | filed with the demand |
|-----|-----------------------|

Drawings, Sheets

| | |
|---------|---------------------|
| 1/4-4/4 | as originally filed |
|---------|---------------------|

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IT2005/000018

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|-----|
| Novelty (N) | Yes: Claims | 1-7 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 1-7 |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | 1-7 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Reference is made to the following document:
D1: US-B1-6 332 460 (PAESANI CARLO) 25 December 2001 (2001-12-25)
2. The present application does meet the criteria of Article 33(2) PCT, because the subject-matter of claim 1 is not disclosed in any of the documents cited in the International Search Report.
3. The present application does also meet the criteria of Article 33(3) PCT, for the following reasons:
 - 3.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document): a double burner for gas cookers, of the type provided with multiple concentric flame crowns, comprising:
 - one head (26) with multiple concentric flame crowns (48, 49);
 - one circular body (16) that contains partitions used to define two different, not communicating channels (20) used to supply gas to the crowns of external flames (49) and one channel (22) used to supply gas to the central flames (48);
 - two separate, not-communicating gas inlets (12 and 14) situated on the bottom of a body (2) used to supply gas to the aforementioned channels selectively, the upper inlet (14) exactly ending in the centre of the body (2) and the lower inlet (12) going beyond the centre (cf. c. 2, l. 19-52; fig.1).
 - 3.2 A problem linked to this type of burner, which can be easily converted into a standard burner without losing the possibility of supplying gas to all flame crowns, is that it lacks compactness in height.
 - 3.3 The problem to be solved by the present invention may be therefore regarded as to reduce the size in height of a burner of the existing type without at the same time losing in burner performances.
 - 3.4 The solution proposed in claim 1 consists in that a vertical channel (3a) branches off from the upper inlet (3), which is provided with the first gas nozzle (5) designed to introduce gas into the central channel (C) that supplies the central flames (FC), while

a diverging pair of ascending channels (4a) branches off from the lower inlet, which is provided with nozzles (6) designed to introduce gas into the channel (E) that supplies the external flames (FE); it being provided that a Venturi chamber (5a) with vertical axis is situated downstream the nozzle (5), and a pair of Venturi chambers (6a) with inclined axis is situated downstream the pair of nozzles (6).

A reduction in height is therefore achieved, while at the same time the length of the diverging sections of the external venturi chambers is not reduced.

Such a solution is neither obvious nor fairly suggested by the prior art, therefore claim 1 is considered as involving an inventive step (Article 33(3) PCT).

4. Claims 2-7 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.